SMALL FARMER PERSPECTIVES ON DEVELOPMENT:

VILLAGE SURVEY IN NORTHEAST THAILAND

SYNTHESIS REPORT

A.I.D. EVALUATION SPECIAL STUDY NO. 64

by

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October 1989

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PREFACE

Market feedback is important to all programs for the delivery of goods and services to consumers. Only with such feedback can programs be adjusted for greater effectiveness. Third world villagers are the primary consumers of agricultural service projects supported by the Agency for International Development (A.I.D.) and other donors. With a view toward soliciting the unbiased views of its agricultural services consumers, the Center for Development Information and Evaluation (CDIE) in the fall of 1987 sponsored a survey of 90 villages in the Weeping Plains area of Northeast Thailand.

The primary objective of that survey was to get small farmers' feedback on the

-- Relative effectiveness of donor agency-sponsored agricultural programs in the area

-- Long-term impact of development programs on the lives of farm families~

The strategy elected was to retain a Thai market research firm (Deemar, Ltd.) staffed by Thai (preferably Northeastern Thai) interviewers who would go into a sample of project-area villages and ask selected questions.

As a preliminary to the field interviews, a contextual background study was conducted of prior development efforts in the region by Hawaiian Agronomics, Inc. The study reviewed the activities of A.I.D., other donors, the Royal Thai Government, and the private sector, seeking to identify all major direct and indirect influences on economic and social change in the region. The point of the background study was to inform the questionnaire development process as well as the analysis of responses given.

The focus of the survey's effectiveness questions was on major categories of A.I.D. interventions: fertilizer, seed, and agricultural credit. An effort was made to design nonleading questions that would encourage farmers to compare A.I.D.sponsored agricultural services (e.g., agricultural credit) with similar services from other, especially nongovernmental, sources, thus providing a purpose-level test of A.I.D programs.

The focus of the impact questions was as broad as possible, on overall quality of life. The idea was to see whether the interviewees, without prompting, would attribute changes for better or worse to A.I.D-sponsored activities, thus providing a goal-level test of A.I.D programs.

A secondary objective of the exercise was to develop a methodology for carrying out low-cost farmer surveys with a view to enabling USAID Missions to employ this tool regularly for their own purposes. Just as the world's leading agribusiness and pharmaceutical firms benefit from ongoing market survey work among third world farm families, so too can A.I.D. The Agency's programs and projects are as dependent on consumer acceptance for success as is any other business entity's ~product line.~ It is logical, therefore, to periodically survey the intended consumers.

This paper is a synthesis of findings from CDIE's prototype small farmer survey effort in Northeast Thailand. Highly distilled, it is intended to communicate the survey's key findings. This synthesis is not meant to supplant the very excellent survey elements themselves, but rather to call attention to them for their value as (1) insight material providing direct feedback to A.I.D. from small farmers and (2) a low-cost prototype for other such survey efforts. The original reports (Contextual Background Study, Demographic Survey, Group Interviews Survey, Individual Interviews Survey), upon which this synthesis was based, have been retained as CDIE Working Paper No. 128. Copies can be obtained from PPC/CDIE, Room 215, SA-18, Washington, D.C. 20523.

SUMMARY

This report analyzes the effects of a broad range of development assistance programs carried out in Northeast Thailand over the past 20 years. All international donor programs were included, as well as Royal Thai Government programs and policies affecting the region. The report differs from myriad others assessing economic development in Northeast Thailand by focusing not on reality as seen through the eyes of the scholar or development technician, but rather on reality as seen through the eyes of the Thai villager. It is, in every sense, an opinion survey. It defines certain agricultural service product lines and certain expected consumers of such goods and services, and asks the consumers what they think of the products.

Because of the complexity of conducting opinion surveys across cultures, not to mention great distances, a contextual background study was conducted first (1) to define programs/ events that appear to have influenced people's lives in the survey area and (2) to indicate the various types of development programs that had been introduced over the period in question. This background study proved valuable both in framing survey questions and interpreting the results.

In all cases, a concerted effort was made to make "nonleading" inquiries. Because survey team members were all Thai, mostly from the region, and they were careful not to mention specific sponsor identification, there is no reason to believe that any association was made between survey personnel and A.I.D.

The survey is valuable from several perspectives:

-- It clearly indicates that villagers have much valuable information to share with development practitioners, and the donor community can benefit from listening to them.

-- Its low-cost, rapid method for collecting valuable client feedback could be used by most USAID Missions.

-- Specific elements of program-related feedback are both surprising and important to overall A.I.D. and other donor programming.

Some of the specific substantive messages communicated by villagers surveyed included the following:

-- Physical infrastructure improvements were far and away the most highly valued changes affecting villagers' lives. This is especially noteworthy in light of A.I.D.'s withdrawal from such activities over the past two

decades.

-- Government policy with respect to rice prices has colored all activities in the agricultural sector, tending to inhibit large-scale adoption of highyielding varieties despite the intense efforts of A.I.D. and other donors to promote them.

-- Exogenous economic influences such as the boom in cassava production (despite resistance by the Royal Thai Government) and migration to temporary employment in Bangkok or abroad have been the source of most of the conspicuous wealth (e.g., automobiles and televisions) among villagers surveyed.

-- Thai farmers are very agile entrepreneurs. Donor programs do not need to break down resistance to change. Rather, donors need to demonstrate to villagers the competitiveness of what they are selling among the marketplace of options available to villagers.

-- A.I.D.'s and other donors' agricultural service projects are generally well regarded, with credit programs getting the highest marks. Survey responses make it clear, however, that impact could be increased dramatically with more attention to tailoring donor goods and services to the needs of the villagers.

The careful reader of this report should be cured of any tendency to view third world small farmers as passive recipients of development assistance given from ~on high.~ Third world farmers are consumers, and as such they are in control of their own choices. The international donor community must accept the reality of the market for its programs and learn to compete in that marketplace.

GLOSSARY

amphur	district within a province
BAAC	Bank for Agriculture and Agricultural Cooperatives
baht	Thai currency; $1.00 U.S. equaled roughly 26 baht at the time of the survey
CDIE	Center for Development Information and Evaluation
EEC	European Economic Community
GDP	gross domestic product
rai	a unit of area measure: one hectare equals 6.25 rai
tambol	subdistrict within a district

1. CONCEPTS AND APPROACH

This paper analyzes the effects of a broad range of development programs on small farmers in Northeast Thailand based upon a survey of the views and opinions of small farmers themselves. The survey, which was sponsored by A.I.D.'s Center for Development Information and Evaluation (CDIE), had two distinct information gathering efforts: a contextual background study and villager interviews.

The contextual background work involved an analysis of reports and statistics concerning economic change in the study area and interviews with recognized experts on the area and topic. The villager interviews were carried out in three stages: (1) reconnaissance of the area for basic data (done through meetings with village headmen), (2) group interviews, and (3) individual in-depth interviews. These distinct tasks were carried out in building-block fashion, each successive element benefiting from the information base provided by earlier elements.

Northeast Thailand was selected for the survey because it is the poorest of Thailand's major administrative areas, and for this and other reasons it has been heavily affected by development assistance efforts sponsored by A.I.D. and other international donors. The region provides as good a laboratory as any in A.I.D.'s purview for soliciting consumer feedback on official economic development assistance.

Because the Northeast Region is too large an area to survey within budget limitations, it was decided to focus on one province. Roi Et Province was selected because it was judged representative, with farms and crops that conform well to the development assistance efforts being promoted by the international donor community.

The primary objective of the survey was to get small-farmer feedback on (1) the relative effectiveness of A.I.D.-sponsored agricultural service programs and (2) the long-term impact of development programs on the lives of farm families.

Toward accomplishment of CDIE's secondary objective, development of a methodology for carrying out low-cost farmer surveys, it was decided to place as much of the work as possible in the hands of Thai nationals. During a week-long visit to Bangkok and the Northeast Region, five entities were identified as having the ability to carry out the task, three of them university-related and two in the private sector. Ultimately, the two private sector firms, Deemar, Ltd., and Hawaiian Agronomics, Inc., were selected to conduct the task as a joint venture.

Deemar, a Thai survey research firm with a long list of national and international clients and several score personnel native to and living in Northeast Thailand, was selected as lead contractor responsible for the actual survey effort: identifying

communities to be surveyed, developing demographic data, refining questionnaires drafted in CDIE, and conducting group and individual interviews.

Hawaiian Agronomics, a Honolulu-based international agribusiness firm with permanent offices in Thailand, was recommended as a subcontractor to Deemar to carry out the contextual background study. Hawaiian Agronomics had the specific knowledge of agricultural practices and programs deemed necessary to establish the development context, knowledge that was not available directly within Deemar.

The players, therefore, were as follows:

-- CDIE, which established the overall survey objectives and provided fairly specific guidance on the line of inquiry and the style of the questionnaire

-- Hawaiian Agronomics, which provided a detailed analysis of economic development efforts and change in the Northeast Region over the prior two decades, which was to inform the processes of questionnaire refinement and interpretation of survey results

-- Deemar, which refined questionnaires, selected the specific communities to be surveyed, developed a demographic database, carried out group and individual interviews, and analyzed and reported the results

2. SUMMARY OF MAJOR STUDY ELEMENTS

2.1 Contextual Background Study

This study was carried out by Hawaiian Agronomics, Inc. The project manager, Hawaiian Agronomics' Office Director in Thailand, had lived some 20 years in Thailand, much of the time in the Northeast Region. An American citizen with a Thai wife, he enjoyed close contacts with the Thai business community, the Thai Government, and the international donor community.

The firm's strategy was to base the analysis on their own experience in the region, amplified by the following additional sources:

-- Review of documents from international donor and Thai Government projects carried out over the past 20 years

-- Extensive interviews with key informants from the public and private sectors

-- Review of pertinent Government policy changes (particularly agricultural policies) affecting the region

-- Analysis of official statistics concerning Thailand in general, and the Northeast Region and Roi Et Province specifically

The report of the contextual study covered the following topics:

-- General overview of the Northeast, and of Roi Et Province in particular

-- Review of the impact of the Thai Government's 5-year plans from 1962 to 1991

-- Analysis of major factors affecting agricultural development in the Northeast

The key findings in each category are discussed below.

2.1.1 Overview of the Northeast and Roi Et

A number of development and quality-of-life indicators were reviewed, comparing statistics for Roi Et Province in the Northeast Region with other regions in Thailand, and with Thailand overall. Per capita income, share of gross domestic product (GDP), land tenure, health and education services, and public and private investment were among the indicators reviewed. Most important of these indicators for the purpose of this report are the per capita income and Thai Government expenditure statistics:

-- Per capita income in Northeast Thailand is the lowest of any region in the Kingdom; it is only 14 percent of that in Bangkok. Income levels in Roi Et Province are 15 percent lower than for the Region overall, or 12 percent of income levels for Bangkok.

-- Government expenditures in Northeast Thailand far exceed those in other regions, and Roi Et Province receives a representative share within the Region.

2.1.2 Impact of Thai Government Five-Year Plans

The contextual background study reviewed each of the Five Year Development Plans since 1961 (the first plan covered 6 years) and summarized their focus. This review shows an evolution of policy from an emphasis on infrastructure development to a focus on reducing income gaps between regions, alleviating key social problems, and finally promoting specific rural development projects with a view to stimulating rural employment and more equitable income distribution.

Apparent from this analysis, and confirmed by the statistics reviewed, is that with each succeeding Five-Year Plan the Thai

Government reinforced its efforts to solve the problems of underdevelopment and poverty in the Northeast by increasing expenditures. The Northeast's share of Thai Government expenditures grew from 29 percent in 1975 to 35 percent in 1985. Given that overall Government expenditures grew fivefold during this period, the magnitude of growth in Government services, much of it with international donor assistance, was notable.

Equally apparent from analysis and statistics, however, is that whatever good was done by Thai Government and international donor-backed development programs, the income disparity between the Northeast and other regions continued to grow. In 1975 per capita income in the Northeast was 49 percent of the Kingdom average and 19 percent of the average for Bangkok. By 1985 the income disparity had grown: Per capita income in the Northeast was only 40 percent of that in the Kingdom and 14 percent of that in Bangkok.

It seems clear that economic growth in Thailand during the period under review was heavily influenced by factors other than allocations of official Government and donor-community assistance.

2.1.3 Major Factors Affecting Agricultural Development

Perhaps the most useful part of the contextual background study was its analysis of the principal economic influences in the Northeast during the study period. It is intriguing to note that, although the Thai Government and some 20 international donor organizations made significant contributions, many of the factors identified as having the greatest influence on development in Northeast Thailand were entirely outside their purview.

The paragraphs below summarize the major factors affecting agricultural development in the Northeast as identified in the contextual study.

National Rice Policy. Rice is the heart of Thailand's agricultural economy, accounting for 40 percent of agricultural GDP and 30 percent of agricultural exports. Rice accounts for more than half the calories consumed by Thai and is therefore the wage-good most affecting the cost of living of Thai consumers. Some 98 percent of Thai farm families grow rice; these families account for 55 percent of total population and 66 percent of the labor force.

In view of these statistics, Thailand's policy for rice is of vast importance to all Thai--rural producers and urban consumers alike.

Since World War II, the Thai Government has taxed rice exports, so that the domestic price of rice has always stayed below the international price. As a result, the Thai economy has been insulated from international competition. The macroeconomic effect of low rice prices in Thailand has been a resource transfer from

rural rice producers to rice consumers and indirectly to their urban employers in the form of lower wages paid. At the same time, relatively low prices may have discouraged rural rice producers from fully utilizing some of the high input-use production technologies introduced by A.I.D. and other donors.

The fact that Northeast Thai farms continue to grow rice, selectively utilizing high input-use production technologies and even selling rice in the international market, is testimony to the tremendous comparative advantage the Northeast Region has for rice production. To an extent Thailand's cities, and their industries, have been built on the backs of the rural rice producers.

Cassava Production. During the 1960s, a strong demand for cassava pellets developed in the European Economic Community (EEC). Cassava had long been grown on a limited basis in the sandy soils of eastern Thailand, where rainfall was too low to support rice. With the growth of the EEC market, farmers began to plant cassava cuttings in similar ecological areas in the Northeast, and an explosive new industry was born.

The Thai Government opposed cassava production on environmental grounds and placed restrictions on the development of pelletizing plants. Cassava was viewed as a nutrient depleter that would wreak long-term harm on fragile soils.

Despite such official opposition, the farmers of Northeast Thailand responded with great enthusiasm to this new economic opportunity. Cassava production increased 10-fold between 1966 and 1985, and the value of exports grew 23-fold during the same period. New lands for cassava production were developed along Northeast Thailand's growing network of roads, for the most part in soils theretofore uncultivated because of low rainfall.

Northeast Thailand's cassava boom provides interesting witness to the dynamism and entrepreneurship of its farmers. Responding to a market half a world away, with a crop largely unknown to them, in the face of Government interference, they nevertheless created a major industry. It is also instructive in some negative ways. As Thai Government agronomists feared, cassava is beginning to cause serious damage to soils. Also worrisome is the continued dependence on one market, the EEC, which is highly regulated and could be closed to Thailand with the stroke of a pen.

Exportation of Labor to the Middle East. One of the greatest wealth generators in Northeast Thailand has been employment outside the Thai economy, with remittances back to communities of origin. During the 1960s and early 1970s, a large number of Northeast Thai were employed by the U.S. Government's Udon Air Base in the province of Udon Thani. As the war in Vietnam came to a close and the United States began to phase out operations at that base, many of the international firms involved in construction and maintenance

tasks turned their attention to the labor-poor Middle East. These firms' initial Thai labor supply in the Middle East came from laid-off Udon Air Base workers.

The economic impact of such labor exportation is considerable. In 1985, some 69,685 Thai went to jobs in the Middle East. In 1986, that number grew to 85,600. The Thai Government, supporting this economic windfall, set up regional recruiting offices and was anticipating an increase to 120,000 workers in 1987.

The effects of this type of employment are seen everywhere in Northeast Thailand, particularly in the form of more consumer goods such as automobiles, motorcycles, televisions, and the like in even the poorest communities. How these nontraditional employment opportunities will affect agricultural development over the long run is unclear, but the short-run effect has been to introduce substantial sums of cash into many of the Northeast's rural villages.

Bank for Agriculture and Agricultural Cooperatives (BAAC) The BAAC was established in 1966 as a state enterprise charged with providing credit to the agricultural sector. During its first 10 years of operation, the BAAC was poorly capitalized and had only a modest impact with its lending activities. In 1975, of the 29 commercial banks in Thailand only 5 were lending to agriculture, and less than 2 percent of total commercial bank lending was for agricultural purposes. An estimated 98.5 percent of farm credit was being provided from informal lending sources.

In 1975 the Thai Government required all commercial banks to channel 5 percent of their loans either directly into agricultural loans or to the BAAC as deposits. This quota was revised to 7 percent in 1976 and 13 percent in 1979. In addition, the Thai Government relaxed restrictions on opening commercial banks in rural areas, requiring that any newly chartered banks lend 60 percent of deposits within the community of residence.

The result of these measures was a dramatic increase in the use of institutional credit in Northeast Thailand (from 1.305 million baht in 1974 to 42.063 million baht in 1983). By 1983, 40 percent of Thai farmers were registered to receive BAAC credit.

What about the 60 percent of Thai farmers still outside the formal credit system? These farmers continue to rely on traders, storekeepers, moneylenders, and other locals who are relatively affluent. Indications are that these sources charge relatively high rates of interest and that they reach down to smaller-size farmers than those who patronize the BAAC. In the Northeast, for example, 20 percent of all farmers have fewer than 10 rai of land. Yet these 20 percent make up only 5 percent of BAAC's clients.

Two other interesting observations can be made with respect to

BAAC farm credit:

-- Among existing clients, there is no statistical relationship between repayment performance and scale of operations.

-- Thailand's poorest region, the Northeast, has the best repayment record, while its richest Central Region has the poorest record of repayment.

Northeast Greenbelt Master Plan. The Thai Government has recently announced a 5-year program to create public works projects in the Northeast. Promoted by the Army, the program expected to develop wells for drinking water, to reforest, to build reservoirs, and the like. Although the program is well budgeted, it is too soon to know what its effects will be.

Conclusions. Several conclusions can be drawn from this review of the major factors affecting agricultural development in the Northeast:

Rice policy. Favorable agricultural policies are critical to development. Unfavorable policies will reduce the impact of investments in even the best programs and projects.

Cassava boom. Thai farmers are quick to recognize and respond to opportunity and will do so with or without official support.

Labor exportation. Thai farmers are economically motivated and will take advantage of off-farm labor opportunities wherever they can. This is apparent in both the ongoing migration to Bangkok and the growth of contract labor for the Middle East.

Farm credit. Thai farmers can and will make use of farm credit when it is provided, whether by institutions or informal lenders. Despite impressive growth of institutional credit in the survey area, the smaller farmers continue to rely heavily on their traditional, informal credit sources.

Northeast greenbelt master plan. National security interests are a strong motivator of government programs to promote economic growth.

2.2 Field Surveys

Field interviews of farm villagers in the target area were carried out by Deemar, a Thai affiliate of the London-based Survey Research Group, which has affiliates in eight Asian countries and New Zealand and Australia. Deemar is the dominant survey research firm in Thailand, with some 50 permanent and part-time employees in the Northeast Region alone. A.I.D. selected Deemar for the study because of its excellent reputation in survey research.

Deemar elected to use a three-step process for carrying out the field study, with each step building on the previous one: reconnaissance of the study area, group interviews, and individual interviews. Deemar drew on Hawaiian Agronomics' contextual background study to enrich its data gathering and analysis process. The following subsections present summary findings from Deemar's field survey work.[1]

2.2.1 Reconnaissance of the Study Areas

Work Plan. With Hawaiian Agronomics' contextual background study of the Northeast Region and Roi Et Province under way and the study area in four Roi Et districts determined, Deemar sent teams into 105 villages to collect basic information concerning demographics and quality of life. The results of this data collection effort were to be used to refine questionnaires for the primary survey effort and to provide insights for subsequent analysis of survey findings.

The reconnaissance was carried out through interviews with headmen or other key residents in each village. The questionnaire covered such general topics as population profile, means of livelihood, public utilities, geographical distances to services, consumer durables, media habits, and income and migration.

Interviews were conducted by Deemar's cadre of trained interviewers resident in Northeast Thailand, working under the supervision of full-time professional supervisors. Questionnaires were edited and coded by Deemar's data processing department in Bangkok, and tabulations were prepared using Merlin software and Prime hardware.

Summary. The following paragraphs summarize the study area reconnaissance.

Population. In villages reconnoitered, the population ranged from 436 to 658 inhabitants, with the average being 546. That number comprised 97 households on average, with an average household size of 5.6 persons. The division by gender was even and there were 2.0 children per household.

Agriculture. Some 90 percent of villagers were engaged in agriculture, with virtually all growing both glutinous and high-yielding rice varieties. Under the category of ~other~ crops in the questionnaire, 32 percent of farmers mentioned that they grew cassava.

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[1]The questionnaires used and more detailed management summaries taken from the deemar report have been retained as CDIE Working Papers. Copies can be obtained from PPC/CDIE, Room 215, SA-18, Washington, D.C. 20523.

Agricultural services. The most commonly mentioned agricultural service was credit from BAAC. Other services mentioned included local rice banks, village development funds, and cooperatives.

Livestock. Villagers surveyed averaged one to three buffalo and one ox or cow per household. Most families also raised chickens and ducks.

Farm equipment. Mechanized farm equipment was prevalent in most villages. The most common types of equipment were locally manufactured vehicles for pulling a plow through rice paddies (in 33 percent of villages) and a locally manufactured truck for transporting people and materials (in 50 percent of villages).

Agricultural extension. Agricultural extension agents visited weekly to monthly in 90 percent of villages surveyed.

Problems faced in agriculture. Drought and insects were listed as the major agricultural problems.

Public utilities. All villages and virtually all households surveyed had access to electricity, two-thirds of them to electricity from the official Thai Electricity Generating Authority. Over 90 percent of villagers had access to pond or well water for domestic use, but 50 percent still relied on the collection of rainwater for all or a portion of their needs.

Services. The following key services were available in the villages surveyed: rice mills (98 percent of villages), schools (60 percent), health centers (15 percent), agricultural chemical outlets (2 percent), and banks (0 percent).

Transportation. Transportation services available in villages were local minibus (61 percent), motorcycle (20 percent), bus (19 percent), and local farm vehicle (10 percent).

Consumer durables. Consumer durables were prevalent; motorcycles, bicycles, televisions, radios, and sewing machines were present in 95 percent or more of villages surveyed. Two-thirds of villagers had at least one refrigerator, and 41 percent possessed at least one pickup truck.

Media habits. All villagers surveyed listened to radio and 94 percent watched television. Radio was predominantly an information source, and television was primarily a source of entertainment.

Alternative income sources. Some 38 percent of villagers surveyed engaged in nonfarm income-generating activities including general labor (18 percent), construction (11 percent), retail (10 percent), silk weaving (9 percent), and basket weaving (7 percent).

Migration. All villages surveyed had citizens who migrate during a portion of the year to other cities in Thailand, with Bangkok being the most common destination. Forty-seven percent of villages had citizens who had migrated to other countries, primarily for short-term jobs in the Middle East.

To sum up the reconnaissance survey in a paragraph, one can say that the population surveyed had an average household size of 5.6 persons, most of whom grew rice and kept livestock. Access to farm credit, mechanized farm equipment, and agricultural extension services was common. The primary farmer complaints concerned drought and pests. Nearly all villagers had access to electricity, rice mills, local schools, public transportation, radio, and television. Alternative income sources included temporary labor and construction jobs locally, in Bangkok, and in the Middle East, as well as local employment in retail and cottage industry.

2.2.2 Group Interviews

Work Plan. With the contextual background study completed, the results of the survey and reconnaissance in, and questionnaire instruments completed, Deemar entered 90 villages in the study area to meet with small community groups.

Qualitative interviews were held with three husband-wife couples at each site. The discussion guide covered the following basic issues:

- Agricultural credit, both cash and in kind
- Agricultural inputs (fertilizer and seeds) and outputs (production and yields)
- Other inputs and services
- Quality of life

Interviews were moderated by an experienced group interviewer who encouraged full and frank expression of opinions. The analytical report was compiled later from transcripts of the interviews.

Summary. The following paragraphs summarize the group interviews.

Agricultural credit. Agricultural credit was explored under two categories: cash credit for investment in agricultural inputs selected by the borrower, and in-kind credit in the form of fertilizer, pesticide, or other inputs.

Those in group discussion agreed that most farmers used some form of cash credit, with the sources available ranging from the

BAAC (most commonly mentioned) to family, friends, and moneylenders. Use of cash credit for consumption spending was believed to be rare. Investment in fertilizer was most common, and investment in pesticides, hired labor, or farm animals/ machinery was likewise mentioned.

With respect to institutional credit sources, the BAAC was praised for its low interest rates and acceptable payment terms. Difficulties with BAAC lending procedures were not mentioned in the group discussions, although they were raised by over half of the interviewees in later individual interviews. Farmers seemed to know about commercial banks through advertising campaigns, but they had no personal experience with them.

In-kind credit was less common than cash credit for the purchase of agricultural inputs. It was commonly used, however, for the whole gamut of household needs, from mosquito netting to water jars. Sources for in-kind credit seemed to depend solely on which shop was the best supplier of the desired good. Villagers did indicate a wish that the BAAC could act more like a co-op, keeping a wider range of goods in stock for sale on its relatively easier credit terms.

Agricultural inputs and outputs. Physical inputs to agriculture, and the results of their application, were explored under the following general lines of inquiry: fertilizer, seeds, and production and yield.

Fertilizer was used by all group interviewees regardless of area or type of crop grown. It is noteworthy, however, that by far the greatest fertilizer users were farmers growing highyielding rice varieties for export. The indigenous glutinous rice grown for local consumption was seldom mentioned in association with fertilizer use.

The most common sources for fertilizer purchases were the agricultural chemical outlets. This fact is noteworthy, as group discussion participants agreed that the BAAC, which also provided fertilizer, had more reliable quality control. Deemar suggested that this behavior (buying from a less preferred source) might be explained by pressures from the agricultural chemical outlets, which might deny pesticide credits if fertilizer were not purchased as well. An alternative explanation might be BAAC’s high credit-application costs (discussed later).

Discussion groups indicated that seeds were acquired from home growing, exchange with neighbors, Government extensionists, and the agricultural chemical outlets. Seeds from the extension offices were generally free, and those from the agricultural chemical outlets were normally paid for in cash. There was a consensus that seeds provided by the Government extensionists were best in quality.

Discussions on production and yield generally turned to the effects of inadequate rainfall. Prices (which were very low at the time of the survey), fertilizer, and pesticides were little mentioned in the context of farm output.

Other inputs and services. Mentioned under the topic of other inputs and services to agriculture were advice and training. In some districts, the Government extensionists received high marks, while in others they were characterized as indifferent and ineffective. In many districts, individual business leaders, special interest groups, and even radio programs were credited with being the best sources of agricultural advice and training.

Quality of life. Quality of life was discussed last, after group participants had ~warmed up~ on less subjective topics. General topic areas covered included health, nutrition, child welfare, access to information, and infrastructure support.

By far the most discussed improvements in quality of life related to physical infrastructure, specifically electricity and roads. Villagers believed that the resultant improvements in transportation and communication had brought village life into the 20th century. Television was frequently mentioned as having greatly improved communication while also offering a major new leisure time activity. Radio was cited for its usefulness in improving communication, and improved roads were credited with enabling the operation of increased numbers of motorcycles, pickup trucks, and public transport vehicles.

Public health services were also mentioned prominently, with family planning, nutrition, sanitation, water jar, and public water programs singled out by many. Participants agreed that health, in general, had improved as a result of better roads and more health facilities.

Nutrition was also considered to have uniformly improved, with one result being healthier children. School lunch and school vaccination programs were cited as major contributors to better child health care.

Summing up, although villagers continue to face hardships and the recurrent problem of drought has not improved, the overall feeling was that life in the villages had improved greatly over what it had been 5 to 10 years earlier.

2.2.3 Individual Interviews

Work Plan. At the conclusion of the village group interviews, one of the participating farm couples was asked to remain for a more in-depth probe that expanded on the group interview topics.

Whereas the questionnaire for group interviews was qualitative in nature, the questionnaire for individual interviews was quantitative in nature but covered the same basic issues reviewed in the group discussions: agricultural credit, agricultural inputs and outputs, and quality of life.

Interviews were conducted by the same personnel as had conducted the earlier group interviews, with 15 percent of such interviews either reconfirmed or personally witnessed by fulltime Deemar field supervisors. Questionnaires were subsequently edited and coded by Deemar's data processing department in Bangkok, and tabulations were prepared on Merlin software and Prime hardware.

Summary. A summary of the individual interviews survey follows.

Agricultural credit. During 1986 and 1987, 76 and 80 percent, respectively, of all farmers interviewed borrowed money. Two-thirds of those cash loans came from the BAAC and nearly one-third from a variety of informal sources, including agricultural cooperatives. There was no mention of commercial bank loans for agriculture.

All interviewees who borrowed from official sources (BAAC affiliates) believed that these institutions gave a better deal than informal lenders because they offered lower interest rates and better repayment terms. Various problems were cited, however, such as the need for multiple long trips to the BAAC affiliate, collateral requirements, paperwork, processing time, approval amounts, and ill treatment by BAAC officials.

Amounts of loans received were high, with half of all loans in the 5,000 to 9,999 baht range--roughly half of the villagers' annual monetary income.

Some 41 percent of interviewee couples purchased goods on credit, with in-kind credit used most among the lowest income groups and least among the high income groups. (Note: The incidence of cash borrowing did not vary with income.)

Whereas cash credit was used almost exclusively for the purchase of agricultural inputs, some 30 percent of in-kind credit was for the purchase of household durables. Primary sources for in-kind credit were retail shops (54 percent) and traveling salesmen (27 percent). Two-thirds of interviewees felt the terms of in-kind credit to be generally unfair, with 42 percent referring to high interest rates and 58 percent to mark-ups for credit sales.

Agricultural inputs and outputs. All farmers used fertilizer (as group discussion had revealed), with 66 percent of them purchasing it from the agricultural chemical outlets and only 17 percent from the BAAC. Lower income farmers were more likely to purchase from the retail outlets, and higher income farmers from

the BAAC. The majority (79 percent) of farmers attributed fertilizer use to a desire for higher yields.

Roughly 80 percent of farmers interviewed relied primarily on home-grown seeds, with agricultural chemical outlets and district agricultural offices providing alternative sources. Home-grown seeds were generally viewed as inferior in quality and those from agricultural chemical outlets were viewed as expensive. The fact that district agricultural office seeds are little used despite their popularity appears to be due to supply constraints.

In general, farmers interviewed were unhappy with yields. Most respondents blamed low yields on drought (43 percent) or pests (42 percent). When queried about expectations for the next year, farmers who had had lower than anticipated yields the previous year tended to expect improvement, and those with higher than anticipated yields tended to expect poorer crops. Farmers with low yields tended to identify drought as their greatest problem, while those with high yields identified pests as the principal problem.

Other inputs and services. Farmers interviewed had little awareness of official assistance outside that provided by the Royal Thai Government. Only 24 percent mentioned such projects. As international donors are very active in the region, generally working through the Royal Thai Government, this can be taken as evidence of close government-to-government collaboration.

When questioned about their awareness of development programs, 89 percent of farmers mentioned the Small-Scale Irrigation Project and the 78 percent mentioned Northeast Rainfed Agriculture Development Project, two A.I.D. projects currently active in the region surveyed. This result is not in conflict with the responses mentioned above because farmers perceived these projects as Royal Thai Government projects.

Most programs mentioned as involving outside assistance were in agricultural inputs, trailed by public health, roads, and electricity. Interviewees considered agricultural chemical companies to have very little influence on economic growth.

Farmers' perceptions of official assistance programs were generally positive. When asked to mention problems, they cited poor communication (14 percent), no agricultural experience (11 percent), unfair treatment by police (11 percent), and corruption (6 percent).

Quality of life. When asked what three things had most affected the quality of village life over the past 5 to 10 years, all interviewees cited infrastructure: roads (76 percent), electricity (71 percent), water supply (49 percent), and public health (30 percent).

Interviewees felt that both nutrition and health had improved in the villages. The reasons they gave were better knowledge (66 percent), better crops (57 percent), and Government assistance (42 percent). With respect to improvements in health alone, credit was given to increased access to health centers (73 percent), better transportation (59 percent), and more doctors and nurses visiting villages (49 percent).

3. FINDINGS

What lessons have been learned from the contextual background study and the follow-on survey of 90 farm villages in Northeast Thailand? Are any lessons buried in the data collected and responses given that might help A.I.D. and other donor programmers and policymakers do their work more effectively?

Lessons learned should be examined in light of the primary objective of the survey, which was to get small farmers' feedback on the relative effectiveness of donor-sponsored agricultural programs in the area and the long-term impact of development programs on the lives of farm families. The lessons should also be explored with a view toward relating donor program objectives to the overall context of the target small farmers' lives. In other words, what does the survey tell us not only about the effectiveness and impact of agricultural services interventions, but also about how these interventions fit into the small farmers' macroeconomy--the larger reality within which they live and to which they relate all economic choices?

The lessons learned are discussed in the order of their relative importance within that macroeconomy.

3.1 Physical Infrastructure

It is clear from the studies that the most pervasive influence on the lives of Northeast Thai villagers has been the development of roads; potable water, electricity, and irrigation systems; health facilities; and other public improvements. These basic infrastructure facilities have had a strong and continuing impact on the lives of everyone in the study area.

Since farm family views about physical and social infrastructure were not specifically requested in the field surveys, it is all the more impressive that such responses were almost invariably offered to the open-ended request to list the ~most important changes~ in the past 5 to 10 years. An idea of the importance of infrastructure improvements also emerges from the quantitative analysis of the contextual background study, as one can track population shifts and economic growth in the wake of public infrastructure improvements.

The crux, it seems, is that the development of basic physical

and social infrastructure greatly increased the options of Northeast Thai villagers--whether to grow more or different crops, to seek related off-farm employment in the area, or even to emigrate--and those villagers have made full use of their increased opportunities. The results of this development have included the following:

- -- Greater overall agricultural output as access to irrigation systems (in some cases) and to markets (in most cases) increased dramatically
- -- Growth of off-farm, agriculture-related industries and employment as Northeast Thai farmers were more closely drawn into the national economy
- -- Increased outside employment opportunities in secondary cities, Bangkok, and abroad as radio and television led to increased awareness of such possibilities, and improved transportation and communication eased the cost and trauma of temporary or permanent relocation

3.2 Government Rice Policy

Although little was learned from the farmer interviews, it was clear from the contextual background study that the Thai Government's rice policy also had a profound influence on Thailand's agricultural economy and on rural-urban economic trade-offs. Rice is the heart of Thailand's agricultural economy, accounting for 40 percent of agricultural GDP and 30 percent of agricultural exports. More important, some 98 percent of Thai farm families grow rice, and rice accounts for over half the calories consumed by all Thai, rural or urban.

Since World War II, the Thai Government has relied on rice exports for substantial tax revenues. As a result, Thai rice producers have been insulated from international competition, rice prices have remained low, resources have been transferred from rural rice producers to urban employers (in the form of lower wages to workers), and rural rice producers may have been discouraged from developing high input-use production technologies.

If the Thai Government's rice policy has had such a profound effect on agricultural development in Thailand, why did the farmer interviews fail to mention it? Probably because the influence of such policies is not well understood at that level. Because rice prices have been regulated in this way for more than 40 years, few farmers can remember the alternative; and, in any case, conditions in Thailand were so different prior to World War II that comparison is irrelevant.

In a word, the rice policy is taken as a given--something over which there is no control. Farmers accept low rice prices as a fact

of life and organize their production practices (on average, utilizing relatively low-input technologies) accordingly.

3 3 Exogenous Economic Influences

With the exception of physical infrastructure improvements and Thai national rice policy, official interventions to support agricultural development in Northeast Thailand are far less important to small farm families than are a number of other economic phenomena. This fact emerged from the contextual background study and was confirmed by the initial survey area reconnaissance for demographic and quality-of-life indicators.

Three exogenous influences stood out clearly from national and study area data:

- -- Production of cassava, a crop receiving no official encouragement and, indeed, actually inhibited by Government policy
- -- Rural-urban income disparities, with average income in Bangkok some eight times higher than in the study area
- -- Remittances from family members working in Bangkok or abroad

These influences, which were outside the purview of A.I.D. and other donor projects, most of which focused on development of agricultural services for the traditional farm economy, are important because they are part of the larger reality of North-eastern Thai farmers. The farmers' choices are not limited to increasing rice yields on existing land through greater use of inputs or to complementing rice-growing income, such as through the development of fish ponds. Farmers also can choose to settle new land unsuited for rice and grow cassava, or they can move to Bangkok or take temporary employment in the Middle East.

It is critical, in analyzing the likelihood of farmer participation in any development program, to be aware of these broader choices because, in effect, donor projects must compete with these alternatives for the farmers' time and energy.

3.4 Farmers as Entrepreneurs

It is clear from the choices Northeastern Thai farmers have made over the 20 years of A.I.D. and other donor interventions that many of them do not feel bound by tradition. They do not need to be "spoon-fed" the technologies that the Thai Government and international donor agencies are promoting. Rather, they need to be convinced.

It is likewise evident from the large numbers of Northeastern

Thai farmers who have chosen emigration to Bangkok, overseas employment, cassava production, or off-farm employment in the region that an entrepreneurial, risk-taking spirit is prevalent among Thai villagers. Donor programs that direct their energies toward breaking down ~resistance to change" are misguided. The appropriate emphasis should be on making certain that whatever technology is being promoted is indeed attractive in comparison with other available choices.

3.5 Agricultural Services Projects

What have the contextual background study and farmer survey taught us about the economic development programs in which the bulk of A.I.D. and other donor energy and resources have been invested over the past 20 years?

The best feedback with respect to this question came from the farmer interviews. This is not surprising, given that the discussion guide for group interviews and the questionnaire for individual interviews were designed expressly to focus on such questions--specifically, on the effectiveness of delivery of agricultural credit, seeds, and fertilizer programs, and their long-term impact on target farmers' lives.

3.5.1 Credit

Inquiries about farm credit elicited the most useful feedback. The Thai Government- and donor-supported BAAC was judged by most interviewees to be the best agricultural credit source available because of its relatively low interest charges and more flexible payment terms. Complaints focused on application procedures, which were felt by some to be onerous because they required long trips to the nearest BAAC office (41 percent), multiple visits (27 percent), specific collateral (41 percent), long process time (27 percent), and too much paperwork (18 percent). There were also complaints about ill treatment by BAAC officials (12 percent) and the inadequacy of loan amounts approved (18 percent).

The contextual background study generally supported this favorable response to the BAAC with data showing that since enhancement of the BAAC's authorities in 1975, lending by formal credit institutions to farmers increased from 1.5 percent market penetration to 40 percent in 1983. However, a review of contextual background demographics offers a lesson behind the accolades for the BAAC credit program. The profile of BAAC borrowers is substantially biased in favor of relatively well-off farmers. As has been noted, 20 percent of all Northeast farmers have less than 10 rai of land, yet these 20 percent make up only 5 percent of BAAC's credit clientele.

The survey data show that the size of BAAC credits, on average, were equal to a year's monetary income for the average

Northeasterner. This suggests again that the BAAC was relatively more active in lending to larger farmers because only they could qualify for and absorb such large credits.

The list of complaints made by BAAC's clients may shed some light on the reasons for this bias toward larger borrowers. High front-end costs, everything else being equal, will inevitably lead to self-screening in favor of higher loan amounts.

Retailers were listed by interviewees as the favored source for in-kind credit; they were relied upon predominantly by smaller farmers. Among the lowest income groups, 65 percent purchased goods on credit, whereas only 35 percent of the highest income group did so. Among both groups, however, there was a widespread belief (83 percent) that the terms offered by retailers were generally unfair.

Given that the donors who support the BAAC normally give a high priority to reaching the smaller farmers, it is apparent that the BAAC's overall success is tempered by its relative failure to reach this group. What seems to be indicated is some additional inquiry to see what can be learned from the shopkeeper-lenders that would either help make BAAC lending procedures more competitive with theirs or enable donors to channel their credit resources through shopkeeper-lenders in order to better reach smaller farmers. (If you can't beat them, join them.)

3.5.2 Seeds

There is a consensus among farmers interviewed that the Thai Government's seed supplies are the best in the Northeast. Yet most farmers acquire their seeds elsewhere. It is not clear from the interviews why this is so, but the implication would seem to be that there are problems with the distribution system.

What is indicated, it seems, is a closer look at the farmers' decision-making process with respect to seed acquisition. With three primary sources for seeds (government seed farms, private suppliers, and home-grown seeds) and everything else being equal, the superior seeds should be used most. This is not happening, and further inquiry is needed to determine why. The contextual background study's observations about rice taxation forcing a low-input cultivation strategy may hold the answer. No doubt home-grown seeds are the cheapest initially, and their use probably requires fewer additional inputs such as fertilizer and pesticides. The answer may also lie in the marketing/distribution system. Good seeds are of little help if they are unavailable or if the opportunity cost of getting them exceeds the net gain from their use.

Unfortunately, with respect to Government- and donorsupported seed development programs, the field survey gives only a partial answer concerning program effectiveness.

3.5.3 Fertilizer

Fertilizer use has become strongly entrenched in the Northeast Thailand farm economy. Virtually all farmers acknowledge the importance of fertilizers to replenish the soils and to increase yields, and virtually all farmers apply fertilizer, particularly those who cultivate the high-yielding rice varieties for export.

Reasons for the purchase of fertilizer from particular sources are less well understood, however. There is a marked preference for purchasing through the agricultural chemical companies (66 percent) and paying cash. The incidence of purchasing through these companies is also highest among the low-income farmers.

This buying behavior is curious in light of the following:

-- The BAAC supplies fertilizer and has outlets in 30 percent of the villages in the target area.

-- There is a consensus among the farmers that the agricultural chemical companies deliver an inferior product.

-- The BAAC will sell the fertilizer on credit.

The explanation for this behavior is not readily apparent from the study results.

4. AFTERTHOUGHTS ON METHODOLOGY

With this first of CDIE'S small farmer surveys completed, a few observations about methodology are in order. Lessons from this first experience will be helpful in guiding future efforts.

4.1 Cost-Effectiveness

In terms of cost-effectiveness, the Northeast Thailand survey effort deserves very high marks. Interviewers held direct discussions in 90 villages. Interviewers made two visits per village (for reconnaissance, then for group and individual interviews), spoke to seven people per village (headman, then three couples, then in depth with one of the three couples). At a cost of $50,000 for the entire survey effort, this translates to $556 per village, or $79 per interview, with the contextual background work, survey analysis, and videotape thrown in free. If these economics can be replicated elsewhere, small farmer surveys are clearly cost-effective for even the smallest of A.I.D. programs.

How was this study accomplished so economically? The keys were (1) plugging into the ~commercial survey research system~ in Thailand, where installed capacity allows great price competitiveness, and (2) doing this with a well-considered plan of

action, work scope, and draft questionnaire.

4.2 The Value of Open-Ended Questions

The importance of open-ended questions was clearly demonstrated in the Northeast Thailand survey. Without such questions, the interviewers could not have appreciated the relative ranking in farmers' minds of Government and donor programs within the purview of the study (agricultural services) vis-a-vis programs outside that purview. The outstanding example of this is seen in responses to the quality-of-life query about the most positive changes in recent decades. The respondents overwhelmingly cited physical infrastructure. There are many in the development community who dispute the equity effects of infrastructure investments (compared with programs focused directly on small farmers), but the farmers interviewed in Northeast Thailand left no doubt about how they felt.

A distorted impression of the relative importance of agricultural services programs would have resulted had the survey not included these open-ended questions.

4.3 Importance of Contextual Background Study

The contextual background study, which was assembled from interviews with experts on the Northeast economy and a review of selected national, regional, and provincial statistics, was helpful because it identified important exogenous economic influences that helped explain certain results of the survey effort. A few examples follow.

Farmer opinions on rice policy were not directly sought in the villager interviews, and they were not offered in response to open-ended questions. Without the contextual background study, the importance of rice policy would never have been understood and the whole question of farmer response to donor rice production programs would have been confused. Although interviewees were all acutely aware of tangible Government interventions through, for example, physical infrastructure construction (roads) and institutions (BAAC), they seemed unaware of the equally powerful but intangible effect of export taxes on the market price for rice.

The cassava boom is another example of the importance of a contextual background study to field survey work. Because the donor agencies and the Thai Government discourage cassava production for environmental reasons and were unaware of the crop's importance to farmers, farmers were not questioned about this important crop. Cassava was not on the long list of crops to rank by importance. Nonetheless, because cassava is so important, roughly one-third of farmers mentioned it in the ~other~ category on the questionnaire. without the contextual background study to call attention to this area, the frequent references to cassava under ~other~ crops might

not have been fully appreciated.

Finally, the story of the importance of emigration and remittances could not have been properly understood without the contextual background study. The relationship between wartime air base employment and Middle East oil field employment would have been particularly underappreciated. Likewise, the prevalence in poor villages of very expensive consumer goods (e.g., televisions, vehicles) could have been misunderstood.

Without an understanding of the overall context of choices and influences on farmers' lives, neither their behavior decisions nor their answers to survey questions can be fully understood.

The following reports on related topics are available from CDIE:

Small Farmer Attitudes and Aspirations, May 1989, Program Evaluation Discussion Paper No. 26 (PN-AAX-217).

Central America: Small Farmer Cropping Systems, December 1980, No. 14 (PN-AAH-977).

A Synthesis of A.l.D. Experience: Small-Farmer Credit, 1973-1985, October 1985, No. 41 (PN-AAL-074).

Credit Programs for Small Farmers: A Project Manager's Reference, June 1987, No. 47 (PN-AAL-090).

Agroforestry Projects for Small Farmers: A Project Manager's Reference, January 1989, No. 59 (PN-AAX-212).

Philippine Small-Scale Irrigation, May 1980, No. 4 (PN-AAH-749).

Sederhana: Indonesia Small-Scale Irrigation, February 1982, No. 29 (PN-AAJ-608).

Bangladesh Small-Scale Irrigation, April 1983, No. 42 (PN-AAL-010).

Colombia: Small Farmer Market Access, December 1979, No. 1 (PN-AAH-768).

Socio-Economic and Environmental Impacts of Low-Volume Rural Roads--A Review of the Literature, February 1980, No. 7 (PN-AAJ-135).